

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Please amend claim 1 as follows:

1. (Amended) A power generating system comprising:

- a compressor configured for compressing ambient air into compressed air having a pressure greater than at least about four atmospheres and an elevated temperature;

- a combustion chamber connected to the compressor, wherein the combustor is configured to receive flow of compressed air from the compressor;

- fuel injection means for injecting fuel into the combustion chamber;

- liquid injection means for injecting a vaporizable non-flammable liquid into the combustion chamber;

- a combustion controller for independently controlling the quantity, pressure and temperature of the compressed air, the fuel delivered to the fuel injection means, and the vaporizable liquid delivered to the liquid injection means so the injected fuel and at least a portion of the compressed air is combusted and the injected liquid is transformed into a vapor in the combustor to create, in the combustion chamber, a working fluid consisting of a mixture of unburned compressed air components, fuel combustion products and the vapor during combustion at a predetermined combustion temperature; and

- a work engine coupled to and supplied with the working fluid formed in the combustion chamber.

Please amend claim 28 as follows:

28. (Amended) The power generating system according to claim [27] 1, wherein the ratio of water weight to fuel weight injected ranges from about 8 to 1 to about 1:1 as the rpm of the engine is increased.

Please amend claim 29 as follows:

29. (Amended) A method of operating a power generating system comprising the steps of:

- compressing ambient air into compressed air having a pressure of at least about four atmospheres, and having an elevated temperature;
- delivering the compressed air into a combustion chamber;
- injecting controlled amounts of fuel into the combustion chamber;
- injecting controlled amounts of a non-flammable liquid into the combustion chamber;
- independently controlling the amount of compressed air, the amount of fuel injected, and the amount of liquid injected so as to combust the injected fuel at least a portion of the compressed air and to transform the injected liquid into a vapor;

wherein a working fluid consisting of a mixture of a non-flammable components of the compressed air, fuel combustion products and vapor is generated in the combustion chamber during combustion at a predetermined combustion temperature.

Please amend claim 76 as follows:

76. (Amended) A method of operating a power generating system comprising the steps of:

- compressing ambient air into compressed air having a pressure of at least about four atmospheres, and having an elevated temperature;
- delivering the compressed air into a combustion chamber;

injecting controlled amounts of fuel into the combustion chamber;

injecting controlled amounts of a non-flammable liquid into the combustion chamber;

independently delivering additional non-flammable liquid to the compressed air prior to introduction of the compressed air into the combustion chamber;

independently controlling the amount of compressed air, the amount of fuel injected, and the amount of liquid injected so as to combust the injected fuel and at least a portion of the compressed air and to transform the injected liquid into a vapor;

wherein a working fluid consisting of a mixture of a non-flammable components of the compressed air, fuel combustion products and vapor is generated in the combustion chamber during combustion at a predetermined combustion temperature.

Please amend claim 88 as follows:

88. (Amended) The energy conversion system according to claim 86, wherein the controller is operative to deliver a quantity of oxygen-containing fluid to the combustor such that a substantial portion of the oxygen therein is consumed when reacted with the fuel.